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PREVENTING AND REMOVING MILDEW ... HOME METHODS

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PREVENTING AND REMOVING MILDEW

—HOME METHODS—

Molds Cause Mildew

Molds that cause mildew grow on anything from which they can get enough food--on cellulose products such as cotton, linen, wood, and paper; on protein substances like silk, leather, and wool.

Though always present in the air, these molds need moisture and certain temperatures in order to grow. Molds commonly develop in muggy summer weather, especially if the house has been closed. They flourish wherever it is damp, warm, poorly aired, poorly lighted--in cellars, in clothing closets, on draperies and rugs in basement recreation rooms, on shower curtains, in damp clothes rolled up for ironing. Also molds are likely to grow in a newly built house because of moisture in the building materials.

As molds grow they cause considerable damage. They discolor fabrics and leather--leave a musty odor. They decay wood. Sometimes molds so severely "eat" into cloth that it rots and falls to pieces. By preventing mildew, valuable clothing and household goods can be preserved for longer use.

TO PREVENT MILDEW

Keep Things Clean

Keep closets, dresser drawers, basements, any place where mildew is likely to grow, as clean as possible. Dust that settles on articles can supply sufficient food for mildew to start, when moisture and temperature are right. Clean clothing is less likely to mildew than soiled clothing.

Keep Things Aired and Dry

Try to remove the cause of dampness. Then thoroughly air and dry out the damp room or article. Otherwise, a layer of moist air settles around articles, and mold spores--always present in the air--have ideal conditions for growth.

In rainy or humid weather keep things as dry as possible. Close doors and windows if it is warm and damp outside. Warm, moist air coming in condenses on cooler surfaces of the house, particularly in the basement, thus increasing the amount of moisture.

Adequate ventilation essential.--Ventilate the house only when outside air is cooler and drier than inside. As the cool air is warmed inside the house, it absorbs moisture. Take advantage of cool nights to freshen the air in the entire house.

If necessary, get rid of the dampness by heating the house for a short time with a stove, furnace, or an electric heater. Then open doors and windows to let out the warmed air that has taken up the extra moisture. Use an electric fan to force out the warm, moist air more quickly.

Poorly ventilated closets get damp and musty during continued wet weather, and clothing hung in them is likely to mildew. To dry the air, burn a small electric light continuously in the closet. The heat is enough to stop mildew if the space is not too large. Leave closet doors and dresser

drawers open occasionally to keep moisture from gathering and to stir up the enclosed air. Take special care to ventilate linen closets in bathrooms.

Run an electric fan in places that cannot be exposed to outdoor breezes. Improved fans designed for special purposes, help keep the house better ventilated. Among these are adjustable window fans that fit into windows of various shapes and sizes.

Mechanical air dryers.--The new electric refrigerator-type air dryers--dehumidifiers--actually remove moisture from the air. They draw in damp air, then condense the moisture on freezer coils so that it may be drained off in the form of water. This equipment, sometimes called a "basement dryer," is useful wherever condensation causes moisture damage. Keep windows and doors closed.

Some chemicals help.--Silica gel, activated alumina, or calcium chloride may be used to absorb moisture from the air. They are sold in department or drug stores sometimes under various trade names.

Silica gel is not harmful to fabrics and can be used over and over. The porous granules remain dry feeling even when saturated--they hold half their weight of water. To use, hang cloth bags of silica gel in clothes closets. Or place an open container of it on the floor or preferably on a shelf of the closet. Keep closet doors closed so that moisture from outside air will not get in.

"Tell tale" silica gel is pink when full of moisture, blue when dry. To dry, simply place moist granules in a vented oven at 300° F. for several hours. Then put in an airtight box and cool before re-using.

Activated alumina is used in the same way as silica gel. Like silica gel, it holds moisture without dripping and is not harmful to clothing.

Calcium chloride holds twice its weight of water and is cheaper than silica gel or activated alumina. But, as it absorbs moisture it liquefies. Do not let this chemical come in contact with clothing or household textiles; it is harmful to them.

To use calcium chloride, put the granular chloride on a nonrusting screen supported in an enameledware container. Then place the open container in the closet and keep the door shut. When calcium chloride becomes liquid replace it with fresh chemical.

In basements and cellars, musty odors which indicate mold growth usually disappear if the house is well heated and dried. If the odor persists, *chloride of lime* is a good deodorant and disinfectant to use. Sprinkle it over the basement floor, and let it stay until all mustiness disappears. Then sweep it up, scrub and dry the floor.

Clothing and Household Textiles

Never let damp or wet clothing or other articles lie around. Dry soiled clothes before throwing them into the hamper. Wash out dishcloths and hang them to dry. Spread out washcloths. Stretch out wet shower curtains. It is the wet curtain left bunched together or sticking to the wall or tub that suffers

Sun and air garments often.

Burn an electric light and place a can of calcium chloride in closets to dry the air.

Use soap and cadmium chloride for a mildew-resistant finish.

most from mildew. Sprinkle for ironing only as many articles as can be ironed in a day. Shake out and dry those not ironed.

Clean before storing.--Wash or dry-clean clothing or household textiles before storing, as soiled articles are more likely to mildew than clean ones. And do not leave sizing or laundry starch in fabrics to be stored since molds feed on these finishes.

Never store textiles in a damp basement, even though they are clean or treated with a mildew-resistant finish.

From time to time, sun and air articles stored in closets. Watch woolen clothing put away in garment bags. A closed bag, dampness, and hot summer weather make ideal conditions for molds to grow.

Protect with mildew-resistant finish.--Make sure that cotton shower curtains, awnings, tents, sails, and so forth, have been treated with chemicals to make them resistant to mildew before using them in damp places. Many such articles are treated before they are placed on the market. If not, you can buy special products at drug and department stores to protect articles against mildew. Do not use these products on clothing as they may irritate the wearer's skin.

Here is a simple treatment using *soap and cadmium chloride* to make cotton articles, such as shower curtains, mildew-resistant. First dip the article in hot soapsuds made of soft water and good neutral soap. Soak a few minutes to be sure the goods are wet through. Then remove the cloth and, without rinsing, put at once into a hot solution of cadmium chloride (1-1/2 ounces cadmium chloride to a gallon of water). Be sure to have plenty of soap in the cloth for it is the combination of the soap with the cadmium chloride that does the trick.

Stir and turn the fabric for about 15 minutes in this bath. Then wring and hang to dry. Use a *twine* clothesline as wire will stain the treated fabric.

Copper sulfate can also be used with soap for making cotton cloth mildew-resistant. But this treatment makes the fabric blue.

Both of these treatments withstand two or three launderings. But after exposure to weather, the soap-cadmium chloride treated fabrics are more satisfactory than those treated with the soap and copper sulfate.

Caution.--Both cadmium chloride and copper sulfate are poisonous, so thoroughly wash pans and utensils that were used for them.

Leather

To protect leather against mildew, sponge with a 1-percent solution of *paranitrophenol* in alcohol. You can purchase this solution at drug stores.

To be sure the solution does not change the color of the leather, test a small area where it will not show. Paranitrophenol protects against mildew for 2 to 3 months.

Thymol is another chemical that can be used in the same way (1-percent solution in alcohol) to keep leather from mildewing.

Protect leather shoes with a good wax dressing. And don't forget the soles. A thin coat of floor wax keeps moisture out and helps prevent mildew.

Painted Surfaces

Indoor wood surfaces covered with enamel or oil-resin paint rarely mildew except under conditions very favorable to mold growth. You can make a mildew-resistant paint by replacing 20 percent or more of the regular pigment with zinc oxide.

For a mildew-resistant finish for outdoor wood surfaces, add spar varnish to exterior oil paint. However, use this varnish only with dark colors.

Books

To keep books in closed bookcases from mildewing, dust them at times with paraformaldehyde. Use this chemical sparingly, for it may be very irritating to some persons.

Another way is to burn a small electric light continuously in the bookcase.

TO REMOVE MILDEW

Clothing and Household Textiles

Remove mildew spots as soon as they are discovered, before the mold growth has a chance to weaken or rot the material. Take off any surface growth by brushing out-of-doors to prevent scattering the spores in the house. Sun and air fabrics thoroughly. Treat mildew spots by whatever method is suitable for the material in question. Dry-clean fabrics that cannot be washed or sponged with water.

Fresh mildew stains.--Wash at once with soap and water any fresh mildew stains on washable clothing or household articles. Rinse well and dry in the sun. If any stain remains, moisten with lemon juice and salt, and spread in the sun to bleach. Then rinse thoroughly, and dry. Use this treatment with care on colored goods.

Sodium perborate is another safe bleach to use on washable cloth. Sponge the mildew spot with a solution made with 1 tablespoon sodium perborate to a pint of lukewarm water, or sprinkle the powder directly on the dampened stain. Let stand a minute or two; then rinse well. For colored material, first test the bleach on a sample of the cloth or on a

Use sodium perborate to bleach fresh mildew stains from uncolored fabrics. Dampen the stain with water, and dust with powdered sodium perborate. Let stand a minute or two; then rinse well with water.

seam or hem of the garment to be sure it will not change the color.

In summer weather soiled dishcloths and washcloths often dry so slowly that they get sour and musty smelling--a sign of mold growth. Boil them a few minutes in water to which baking soda (2 teaspoons to a quart of water) has been added. Use a bleach if necessary. Then launder as usual.

Old mildew stains.--Dip old stains on undyed cotton, linen, or rayon in Javelle water or other chlorine bleach for no longer than 1 minute. Then dip into a weak vinegar solution (2 tablespoons to a cup of water) to stop the action of chlorine. Finally, rinse well with water. *Never* use a chlorine bleach on silk or wool.

Upholstered Articles, Mattresses, Rugs

First remove loose mold from outer coverings of upholstered articles and mattresses by brushing with a whisk broom. Do this outdoors to prevent scattering mildew in the house. If possible, run a vacuum-cleaner attachment over the surface to draw out more of the mold. Sun and air the article to stop the growth.

If necessary, sponge lightly with thick soapsuds and wipe with a clean, damp cloth. In doing this, get as little water on the fabric as possible so the filling does not get wet. Another way is to wipe upholstered furniture with a cloth wrung out of dilute alcohol (1 cup denatured alcohol to 1 cup water). Dry the article thoroughly.

Sponge mildewed rugs and carpets with thick soapsuds or a rug shampoo. Then remove the soap by wiping with a cloth dampened in clear water. Dry in the sun.

Fumigate if mildew has grown into the inner part of the articles. To do this, burn formaldehyde candles in a tightly closed room in which the articles have been placed. Be careful. Formaldehyde is very irritating. Follow directions given with the candles. Or send the things to a reliable dry-cleaning or storage company for fumigating.

Leather

To remove mildew from leather goods, wipe with a cloth wrung out of dilute alcohol (1 cup denatured alcohol to 1 cup water). Dry in a current of air. If necessary, wash with thick suds of a mild, neutral soap or saddle soap. Then wipe with a damp cloth and dry in an airy place. Polish shoes and leather luggage with a good wax dressing.

To kill molds that have grown into leather goods, fumigate with formaldehyde gas. To do this, burn formaldehyde candles in a tightly sealed room or closet in which the articles have been placed. Follow directions given with the candles. *Do not inhale* formaldehyde fumes. Fumigation will kill any molds present at the time but will not protect against future attacks.

Wood

Wipe mildewed floors and woodwork with a cloth dipped in water to which a little kerosene has been added. Or, if necessary, wash the wood with warm water and soapsuds, then

Brush mildewed articles outdoors in the sun.

Protect leather shoes with wax.

dry thoroughly. Remove mildew stains from painted surfaces with paint cleaners, available in many stores. Then apply a mildew-resistant paint (see p. 6).

If the mold has grown into the wood under paint or varnish, remove the finish and bleach the stain with oxalic acid. Oxalic acid is poisonous and should be handled carefully. Apply a solution (3 tablespoons of the acid to a pint of water) or put the acid directly on the stain. Finally, rinse the wood well with water. Dry thoroughly before repainting.

Paper

Brush any dry, loose mold from paper with a clean, soft cloth. If the mildewed paper is damp, dry it first in an airy place.

If paper is washable, wipe it with a cloth wrung out of thick soapsuds, then with clear water. Take care not to wet the paper more than necessary. Do not rub it. Finally pat with a soft, dry cloth. If stains remain, bleach with a commercial ink eradicator. Be careful if the paper is colored, for the eradicator will bleach print and dyes as well as stains.

Spread pages of books out fanwise to air them. If the books are very damp, sprinkle cornstarch or pure talc between the leaves to take up the moisture. Leave starch or talc on for several hours, then brush off.

When wallpaper has mildewed, be sure to dry not only the paper but also the plaster beneath it. If necessary, heat the room for several hours or days. Let the plaster dry slowly to prevent it from cracking.

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